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S-5669**REMARKS**

Applicant wishes to thank the Examiner for the detailed remarks and the allowability of claims 20, 21, and 34-37. Claims 11, 20, 30, and 34 have been amended. Claims 20 and 34 have been amended only to be re-written in independent form including all of the limitations of the base claim and any intervening claims and are therefore properly allowable. New claims 38-41 are presented. Accordingly, claims 11-19, 30-33, and 38-41 are pending.

Claims 11 and 13-16 were rejected under 35 USC §103(a) as being unpatentable over *Hamilton et al.* (5,296,854) in view of *Hall et al.* (6,216,065). Applicant respectfully traverses these rejections as there is absolutely no teaching, suggestion, or motivation to modify *Hamilton* in view of *Hall*.

Hamilton et al. refers specifically to a method for representing the aircraft structural outlines in a helmet display to maintain spatial and situational awareness of the external world within a HMD as the pilot turns his head. That is, with reference to Figure 7, the structural outlines 81L, 81R, corresponding to the left and right windshield posts 61L, 61R of the helicopter H are superimposed upon a video image generated by the HMD subsystem 40. Situational awareness may then be maintained with reference to the helicopter windshield as the pilot turns his head since the structural outlines of the canopy are generated in the HMD. As discussed in the background of *Hamilton et al.*:

During visual flight conditions, the pilot utilizes a cognitive mechanism that allows the pilot to safely and efficiently maintain continual spatial and situational awareness of the external world vis-à-vis the aircraft. More specifically, the pilot, either consciously or subliminally, utilizes the canopy structure of the aircraft as a frame of reference to orientate his visual view of the external world vis-à-vis the aircraft. This cognitive mechanism precludes pilot disorientation during visual flight conditions inasmuch as the canopy structure provides an effective reference for maintaining spatial and situational awareness of the external world. A useful analogy would be the automobile driver who utilizes the hood and front bumpers of his automobile to maintain a continual spatial and situational awareness of the external world, i.e., the relationship of his automobile to the road, other traffic, pedestrians, etc.

[col. 2:55-3:3]

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Hamilton discloses only conventional flight symbology and has no means to provide guidance from external sensors. *Hamilton* is not applicable to anything but a helmet mounted display (HMD) as projecting the canopy on a non-movable display would provide no benefit.

As admitted by the Examiner, *Hamilton* fails to disclose or suggest aircraft position with respect to a landing point. *In fact, Hamilton provides no disclosure whatsoever regarding aircraft position with respect to either a landing point or an approach thereto.*

Hall discloses a moving map display in which various points such as the aircraft position and a landing point are disclosed. *Hall* recites that:

In operation, the processor 32 uses the digital terrain elevation data to display a digital moving map image on the display screen 38 that may be centered at a latitude and longitude supplied to the processor 32 from the GPS receiver 42. The processor 32 updates the displayed image each time it receives a new latitude and longitude. Thus, as the helicopter 12 moves, the latitude and longitude sensed by the GPS receiver 42 changes and the map image is updated, giving the appearance of a single continuously scrolling map image moving across the surface of the display area of the display screen 38.

[Col. 5, lines 18-28.]

Hall makes no reference to imaging systems or to the fusion of imagery information onto the moving map display. In other words, *Hall* is basically just a map display rather than a system to enhance situational awareness and facilitate a landing as *Hall* provides no imagery component. *Hamilton* makes no reference to showing an aircraft position with respect to a landing point and *Hall* makes no reference to the fusion of imagery information.

Neither reference alone or in combination discloses, suggests, or teaches the fusion of environmental information and imagery information into a combined output to display an aircraft current position relative to a designated landing point as claimed in the present invention. Simply, there is no motivation to combine *Hamilton* in view of *Hall* as proposed by the Examiner because each is concerned with a separate and distinct flight realm. Furthermore, *Hamilton* is only concerned with projecting a simulated windscreen on a HMD and makes no mention of specific usage thereof. Of course, a simulated windscreen may generally assist situational awareness but it does not facilitate landing at a designated landing point. The only motivation to make the proposed combination is by following the knowledge disclosed within the present invention. This is

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impermissible usage of hindsight in an attempt to re-create Applicant's device. Accordingly, the claims are properly allowable.

The balance of the rejections also utilize *Hamilton* in view of *Hall* and are therefore improper for at least the reasons discussed above. Notably, claims 32 and 33 were rejected under 35 USC §103(a) as being unpatentable over *Hamilton* in view of *Hall*, *Baker* and *Kelly et al.* Although not dispositive, the utilization of such a significant number of references further supports Applicant's contention that the Examiner is impermissibly utilizing hindsight in an attempt to re-create Applicant's claimed system.

Even if the combination were properly made – which it is not; there are differences between the claimed invention and the teachings of the cited references so that the combination does not meet the limitations of Applicant's claims. Applicant has amended claims 11 and 30 to recite “said display generating symbology in response to said combined output which displays an aircraft current position relative to a designated landing point to facilitate a landing at the designated landing point” and “generating symbology in response to said combined output which relates an aircraft current position relative to a designated landing point to facilitate a landing at the designated landing point” The proposed combination – even if proper – still fails to disclose facilitating a landing at the designated landing point as recited in the amended claims.

Applicant does not claim to have invented the concept of a moving map display or an approach to landing system. Rather, Applicant has provided a unique system which enhances situational awareness in a degraded visual environment which fuses environmental information and imagery information while displaying an aircraft current position relative to a desired landing point to facilitate a landing at the designated landing point. Applicant fuses guidance data from a variety of sources and integrates the resultant information into a display, cueing from which landing in degraded visual conditions. Applicant's display method is not limited to helmet mounted devices, and it can be applied to cockpit located head down displays as well. The claims are patentable.

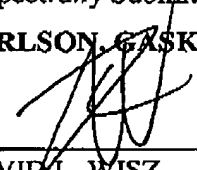
New claims 38-41 recite other features of the present invention which are neither disclosed nor suggested by the cited references and are thus properly allowable.

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Please charge \$400 to Deposit Account No. 19-2189 for two additional independent claims. If any additional fees or extensions of time are required, please charge to Deposit Account No. 19-2189.

Applicant respectfully submits that this case is in condition for allowance. If the Examiner believes that a teleconference will facilitate moving this case forward to being issued, Applicant's representative can be contacted at the number indicated below.

Respectfully Submitted,
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